

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-327274

(43)Date of publication of application : 10.12.1993

(51)Int.Cl. H05K 9/00

H01F 1/00

(21)Application number : 03-113132

(71)Applicant : MITSUBISHI RAYON CO LTD

(22)Date of filing : 17.05.1991

(72)Inventor : ODA MASA HARU
SAKO YOSHIHIRO
ANDO MAYUMI
TAKADA RIKISHI

(54) ELECTROMAGNETIC WAVE SHIELDING MATERIAL

(57)Abstract:

PURPOSE: To obtain a high shielding effect to both electric field and magnetic field occurring from CRT, plasma, EL, etc., by forming a material made of good conductive fibers having at least one amorphous alloy layer with a high permeability.

CONSTITUTION: A material made of good conductive fibers 1 and 2 having at least one amorphous alloy layer 3 with a high permeability is formed. For example, a plating solution with a composition consisting of 0.1mol./l of iron (II) chloride, 0.9mol./l of cobalt (II) sulfate, 0.1mol./l of sodium phosphite, 0.1mol./l of boric acid and 0.002mol./l of hydroquinone is placed in a plating bath and is adjusted to pH1.4 and is held at 50°C.

A polyester mesh with 200 meshes nickel-plated is placed in the plating bath as a work electrode and is dipped between two opposed electrodes made of cobalt. Further, a voltage equivalent to a current density of 0.05A/cm² is applied between the electrodes for 6 minutes, and the iron-cobalt-phosphorus amorphous alloy layer 3 is precipitated on the mesh.

